

Contents

File system management commands	1
cd	1
copy.....	2
delete	5
dir	6
execute.....	7
fdisk.....	7
file prompt	9
fixdisk	10
format	10
gunzip.....	11
gzip.....	12
md5sum	13
mkdir	13
more	14
mount	14
move	15
pwd.....	16
rename	16
reset recycle-bin.....	16
rmdir	17
sha256sum.....	18
tar create	18
tar extract	19
tar list.....	20
umount	21
undelete	22

File system management commands

ⓘ IMPORTANT:

- Before managing storage media, file systems, directories, and files, make sure you know the possible impact.
 - A file or directory whose name starts with a dot character (.) is a hidden file or directory. To prevent the system from hiding a file or directory, make sure the file or directory name does not start with a dot character.
 - Some system files and directories are hidden. For correct system operation and full functionality, do not modify or delete hidden files or directories.
-

File system names, directory names, and file names must be compliant with the naming conventions. For more information about the naming conventions and the methods for specifying the names, see file system management in *Fundamentals Configuration Guide*.

Before you use the **copy**, **delete**, **fixdisk**, **format**, **gunzip**, **gzip**, **mkdir**, **move**, **rename**, **rmdir**, or **undelete** command on a file system, make sure the file system is not write protected.

You cannot access a storage medium that is being partitioned, or a file system that is being formatted or repaired. To access the file system, wait for the ongoing operation to be completed and then use one of the following methods:

- Use the absolute path to specify a file or directory. For example, use the **dir flash:/** command to display the files and directories in the **flash:** file system.
- Use the **cd** command to change the working directory to the root directory of the file system before accessing a file or directory in the file system. For example, to display the files and directories in the root directory of the **flash:** file system, perform the following tasks:
 - a. Use the **cd flash:/** command to change the working directory to the root directory of the file system.
 - b. Execute the **dir** command.

The device supports the FIPS mode that complies with NIST FIPS 140-2 requirements. Support for features, commands, and parameters might differ in FIPS mode and non-FIPS mode. For more information about FIPS mode, see *Security Configuration Guide*.

cd

Use **cd** to change the working directory.

Syntax

```
cd { directory | .. }
```

Views

User view

Predefined user roles

network-admin

Parameters

directory: Specifies the destination directory.

..: Specifies the parent directory. If the working directory is the root directory, an error message appears when you execute the **cd ..** command. No online help information is available for this keyword.

Examples

```
# Access the test directory after logging in to the device.
```

```
<Sysname> cd test
```

```
# Change to the parent directory.
```

```
<Sysname> cd ..
```

copy

Use **copy** to copy a file.

Syntax

In non-FIPS mode:

```
copy source-file { dest-file | dest-directory } [ vpn-instance vpn-instance-name ] [ source interface interface-type interface-number ]
```

In FIPS mode:

```
copy source-file { dest-file | dest-directory }
```

Views

User view

Predefined user roles

network-admin

Parameters

source-file: Specifies the name or URL of the file to be copied in non-FIPS mode, and specifies the name of the file to be copied in FIPS mode. If the file resides on a remote file server rather than on the device, specify the URL of the file. Whether a URL is case sensitive depends on the server.

dest-file: Specifies the name or URL for the destination file in non-FIPS mode, and specifies the name for the destination file in FIPS mode. To copy the source file to a remote file server, specify a URL. Whether a URL is case sensitive depends on the server.

dest-directory: Specifies the destination directory or URL in non-FIPS mode, and specifies the destination directory in FIPS mode. To copy the source file to a remote file server, specify a URL. The device copies the source file to the destination location and saves the file with its original file name. Whether a URL is case sensitive depends on the server.

vpn-instance *vpn-instance-name*: Specifies the MPLS L3VPN instance to which the destination remote file server belongs. The *vpn-instance-name* argument represents the VPN instance name, a case-sensitive string of 1 to 31 characters. If the server belongs to the public network, do not specify this option.

source interface *interface-type interface-number*: Specifies the source interface used to connect to the server. After you specify the source interface, the device uses the primary IP address of the source interface as the source IP address for outgoing packets. If you do not specify this option, the device uses the outgoing interface as the source interface.

Usage guidelines

In FIPS mode, the **copy** command can only copy a local file and save it locally.

In non-FIPS mode, you can use the **copy** command to perform the following tasks:

- Copy a local file and save it locally.
- Copy a local file and save it to an FTP, TFTP, or HTTP server.
- Copy a file from an FTP, TFTP, or HTTP server and save it locally.

To specify a file or directory, use the following guidelines:

Location	Name format	Remarks
On the device	Use the file name guidelines in <i>Fundamentals Configuration Guide</i> .	N/A
On an FTP server	Enter the URL in the format of ftp://FTP username[:password]@server address[:port number]/file path[/file name] .	The username and password must be the same as the username and password configured on the FTP server. If the server authenticates users only by the username, you are not required to enter the password. For example, to use the username a and password 1 and specify the startup.cfg file in the authorized working directory on the FTP server 1.1.1.1, enter ftp://a:1@1.1.1.1/startup.cfg.
On a TFTP server	Enter the URL in the format of tftp://server address[:port number]/file path[/file name] .	For example, to specify the startup.cfg file in the working directory on TFTP server 1.1.1.1, enter the URL tftp://1.1.1.1/startup.cfg.
On an HTTP server	Enter the URL in the format of http://[HTTP username[:password]@]server address[:port number]/filepath[/file name] .	The username and password in the URL must be the same as the username and password configured on the server. If only the username is required for authentication, you do not need to enter the password. If authentication is not required, you do not need to enter the username or password. For example, the startup.cfg file is saved in the authorized directory on the HTTP server at 1.1.1.1. The HTTP account username and password are a and 1, respectively. To copy the file, enter the URL http://a:1@1.1.1.1/startup.cfg. If authentication is not required, enter the URL http://1.1.1.1/startup.cfg.

To specify an IPv6 address, enclose the IPv6 address in square brackets ([]), for example, ftp://test:test@[2001::1]:21/test.cfg.

Examples

Copy the **test.cfg** file in the current directory and save it to the current directory as **testbackup.cfg**.

```
<Sysname> copy test.cfg testbackup.cfg
Copy flash:/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file flash:/test.cfg to flash:/testbackup.cfg...Done.
```

Copy the **1.cfg** file from the **flash:** file system's **test** directory to the USB disk. Save the copy to the **testbackup** directory on the first partition as **1backup.cfg**.

```
<Sysname> copy flash:/test/1.cfg usba0:/testbackup/1backup.cfg
Copy flash:/test/1.cfg to usba0:/testbackup/1backup.cfg? [Y/N]:y
Copying file flash:/test/1.cfg to usba0:/testbackup/1backup.cfg...Done.
```

Copy the **test.cfg** file in the current directory and save it to the root directory of a file system in a specific slot as **testbackup.cfg**.

```
<Sysname> copy test.cfg slot2#flash:/
Copy flash:/test.cfg to slot2#flash:/test.cfg? [Y/N]:y
Copying file flash:/test.cfg to slot2#flash:/test.cfg...Done.
```

Copy **test.cfg** from the working directory on FTP server 1.1.1.1. Save the copy to the local current directory as **testbackup.cfg**. The FTP username is **user**. The password is **private**.

```
<Sysname> copy ftp://user:private@1.1.1.1/test.cfg testbackup.cfg
```

```

Copy ftp://user:private@1.1.1.1/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file ftp://user:private@1.1.1.1/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the current directory. Save the copy to the working directory on FTP server
1.1.1.1 as testbackup.cfg. The FTP username is user. The password is private.
<Sysname> copy test.cfg ftp://user:private@1.1.1.1/testbackup.cfg
Copy flash:/test.cfg to ftp://user:private@1.1.1.1/testbackup.cfg? [Y/N]:y
Copying file flash:/test.cfg to ftp://user:private@1.1.1.1/testbackup.cfg... Done.
# Copy test.cfg from the working directory on TFTP server 1.1.1.1. Save the copy to the local current
directory as testbackup.cfg.
<Sysname> copy tftp://1.1.1.1/test.cfg testbackup.cfg
Copy tftp://1.1.1.1/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file tftp://1.1.1.1/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the current directory. Save the copy to the working directory on TFTP server
1.1.1.1 as testbackup.cfg.
<Sysname> copy test.cfg tftp://1.1.1.1/testbackup.cfg
Copy flash:/test.cfg to tftp://1.1.1.1/testbackup.cfg? [Y/N]:y
Copying file flash:/test.cfg to tftp://1.1.1.1/testbackup.cfg... Done.
# Copy test.cfg from the working directory on FTP server 1.1.1.1. Save the copy to the local current
directory as testbackup.cfg. The FTP username is user. The password is private. The FTP server
belongs to VPN instance vpn1.
<Sysname> copy ftp://user:private@1.1.1.1/test.cfg testbackup.cfg vpn-instance vpn1
Copy ftp://user:private@1.1.1.1/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file ftp://user:private@1.1.1.1/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the working directory on TFTP server 1.1.1.1. Save the copy to the local current
directory as testbackup.cfg. The TFTP server belongs to VPN instance vpn1.
<Sysname> copy tftp://1.1.1.1/test.cfg testbackup.cfg vpn-instance vpn1
Copy tftp://1.1.1.1/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file tftp://1.1.1.1/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the working directory on FTP server 2001::1. Save the copy to the local current
directory as testbackup.cfg. The FTP username is user. The password is private.
<Sysname> copy ftp://user:private@[2001::1]/test.cfg testbackup.cfg
Copy ftp://user:private@[2001::1]/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file ftp://user:private@[2001::1]/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the working directory on TFTP server 2001::1. Save the copy to the local
current directory as testbackup.cfg.
<Sysname> copy tftp://[2001::1]/test.cfg testbackup.cfg
Copy tftp://[2001::1]/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file tftp://[2001::1]/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the authorized directory on HTTP server 1.1.1.1. Save the copy to the local
current directory as testbackup.cfg. The HTTP login username is user. The password is private.
<Sysname> copy http://user:private@1.1.1.1/test.cfg testbackup.cfg
Copy http://user:private@1.1.1.1/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file http://user:private@1.1.1.1/test.cfg to flash:/testbackup.cfg... Done.
# Copy test.cfg from the current directory. Save the copy to the authorized directory on HTTP server
1.1.1.1 as testbackup.cfg. The HTTP login username is user. The password is private.
<Sysname> copy test.cfg http://user:private@1.1.1.1/testbackup.cfg
Copy flash:/test.cfg to http://user:private@1.1.1.1/testbackup.cfg? [Y/N]:y
Copying file flash:/test.cfg to http://user:private@1.1.1.1/testbackup.cfg... Done.

```

Copy **test.cfg** from the authorized directory on HTTP server 2001::1. Save the copy to the local current directory as **testbackup.cfg**. The HTTP login username is **user**. The password is **private**.

```
<Sysname> copy http://user:private@[2001::1]/test.cfg testbackup.cfg
Copy http://user:private@[2001::1]/test.cfg to flash:/testbackup.cfg? [Y/N]:y
Copying file http://user:private@[2001::1]/test.cfg to flash:/testbackup.cfg... Done.
```

delete

Use **delete** to delete a file.

Syntax

```
delete [ /unreserved ] file
```

Views

User view

Predefined user roles

network-admin

Parameters

/unreserved: Permanently deletes the specified file. If you do not specify this keyword, the command moves the file to the recycle bin.

file: Specifies the name of the file to be deleted. Asterisks (*) are acceptable as wildcards. For example, to remove files with the **.txt** extension in the current directory, enter **delete *.txt**.

Usage guidelines

The **delete /unreserved file** command deletes a file permanently. The file cannot be restored.

The **delete file** command (without **/unreserved**) moves a file to the recycle bin.

A file moved to the recycle bin can be restored by using the **undelete** command.

Do not use the **delete** command to delete files from the recycle bin. To delete files from the recycle bin, use the **reset recycle-bin** command.

If you delete two files that have the same name from different directories, both files are retained in the recycle bin. If you successively delete two files that have the same name from the same directory, only the most recently deleted file is retained in the recycle bin.

Examples

Remove the **1.cfg** file from the current directory.

```
<Sysname> delete 1.cfg
Delete flash:/1.cfg? [Y/N]:y
Deleting file flash:/1.cfg...Done.
```

Permanently delete the **1.cfg** file from the current directory.

```
<Sysname> delete /unreserved 1.cfg
The file cannot be restored. Delete flash:/1.cfg? [Y/N]:y
Deleting the file permanently will take a long time. Please wait...
Deleting file flash:/1.cfg...Done.
```

Related commands

reset recycle-bin

undelete

dir

Use **dir** to display files or directories.

Syntax

```
dir [ /all ] [ file | directory | /all-file systems ]
```

Views

User view

Predefined user roles

network-admin

Parameters

/all: Displays all files and directories in the current directory, visible or hidden. If you do not specify this option, only visible files and directories are displayed.

file: Displays a specific file. This argument can use the asterisk (*) as a wildcard. For example, to display files with the **.txt** extension in the current directory, enter **dir *.txt**.

directory: Displays a specific directory.

/all-file systems: Displays files and directories in the root directories of all file systems on the device.

Usage guidelines

If no option is specified, the command displays all visible files and directories in the current directory.

The directory name of the recycle bin is **.trash**. To display files in the recycle bin, use either of the following methods:

- Execute the **dir /all .trash** command.
- Execute the **cd .trash** command and then the **dir** command.

If multiple users perform file operations (for example, creating or deleting files or directories) at the same time, the output for this command might be incorrect.

Examples

Display information about all files and directories in the current directory.

```
<Sysname> dir /all
Directory of flash:/
...
```

Display files and directories in the root directories of all file systems on the device.

```
<Sysname> dir /all-file systems
Directory of flash:/
...
```

```
Directory of usba0:/
...
```

Table 1 Command output

Field	Description
Directory of	Current directory.
0 -rwh 3144 Apr 26 2014 13:45:28 xx.xx	File or directory information: <ul style="list-style-type: none">• 0—File or directory number, which is automatically allocated by the

Field	Description
	<p>system.</p> <ul style="list-style-type: none"> • -rwh—Attributes of the file or directory. The first character is the directory indicator (d for directory and - for file). The second character indicates whether the file or directory is readable (r for readable). The third character indicates whether the file or directory is writable (w for writable). The fourth character indicates whether the file or directory is hidden (h for hidden, - for visible). Modifying, renaming, or deleting hidden files might affect functions. • 3144—File size in bytes. For a directory, a hyphen (-) is displayed. • Apr 26 2014 13:45:28—Last date and time when the file or directory was modified. • xx.xx—File or directory name.

execute

Use **execute** to execute a batch file.

Syntax

```
execute filename
```

Views

System view

Predefined user roles

network-admin

Parameters

filename: Specifies the name of a batch file.

Usage guidelines

A batch file contains a set of commands. Executing a batch file executes the commands in the file one by one.

To execute a batch file on the device, create a batch file on a PC and load the batch file to the device.

As a best practice, try every command on the device to make sure the command can be executed correctly before adding the command to a batch file. If a command is invalid or a condition for executing the command is not met, the command fails and the system continues to execute the next command.

When executing an interactive command in a batch file, the system uses the default inputs.

Examples

```
# Execute batch file test.bat.
<Sysname> fdisk usba: 3
[Sysname] execute test.bat
```

fdisk

Use **fdisk** to partition a storage medium.

Syntax

```
fdisk medium [ partition-number ]
```

Views

User view

Predefined user roles

network-admin

Parameters

medium: Specifies the name of the storage medium to be partitioned.

partition-number: Specifies the number of partitions, in the range of 1 to 4. If you specify this argument, the storage medium is divided evenly into the specified number of partitions. To customize the sizes of partitions, do not provide this argument.

Usage guidelines

The flash memory cannot be partitioned. A partition cannot be partitioned.

Before partitioning a storage medium, perform the following tasks:

- Back up the files in the storage medium. The partition operation clears all data on the medium.
- Make sure no other users are accessing the medium.
- Make sure the storage medium to be partitioned is not write protected. If the storage medium is write protected, the operation will fail, and you must remount or reinstall the storage medium to restore access to the storage medium.

After partitioning a storage medium, you must format the partitions to create the file systems before you can access the file systems.

The actual partition size and the specified partition size might have a difference of less than 5% of the storage medium's total size.

To change the sizes of partitions on a storage medium, partition the storage medium again and specify the required sizes for the partitions.

Before removing a partitioned storage medium, you must unmount all file systems on the storage medium.

Examples

Divide the USB disk on the device evenly into three partitions.

```
<Sysname> fdisk usba: 3
Capacity of usba: : 256M bytes
usba: will be divided into the following partitions:
DeviceName      Capacity
usba0:          85MB
usba1:          85MB
usba2:          86MB
All data on usba: will be lost, continue? [Y/N]:y
Partitioning usba:...Done.
```

Divide the USB disk on the device into one partition.

```
<Sysname> fdisk usba:
The capacity of usba: : 256M bytes
Partition 1 (32MB~224MB, 256MB. Press CTRL+C to quit or Enter to use all available space):
// Press Enter or enter 256 .
usba: will be divided into the following partition(s):
DeviceName      Capacity
usba0:          256MB
All data on usba: will be lost, continue? [Y/N]:y
```

```

Partitioning usba:...Done.

# Divide the USB disk on the device into three partitions and specify the size for each partition.
<Sysname> fdisk usba:
The capacity of usba: : 256M bytes
Partition 1 (32MB~224MB, 256MB, Press CTRL+C to quit or Enter to use all available
space):128

// Enter 128 to set the size of the first partition to 128 MB.
Partition 2 (32MB~96MB, 128MB, Press CTRL+C to quit or Enter to use all available space):31

// Enter 31 to set the size of the second partition to 31 MB.
The partition size must be greater than or equal to 32MB.
Partition 2 (32MB~96MB, 128MB, Press CTRL+C to quit or Enter to use all available
space):1000

// Enter 1000 to set the size of the second partition to 1000 MB.
The partition size must be less than or equal to 128MB.
Partition 2 (32MB~96MB, 128MB, Press CTRL+C to quit or Enter to use all available space):127

// Enter 127 to set the size of the second partition to 127 MB.
The remaining space is less than 32MB. Please enter the size of partition 2 again.
Partition 2 (32MB~96MB, 128MB, Press CTRL+C to quit or Enter to use all available space):56

// Enter 56 to set the size of the second partition to 56 MB.
Partition 3 (32MB~40MB, 72MB, Press CTRL+C to quit or Enter to use all available space):

// Press Enter to assign the remaining space to the third partition.
usba: will be divided into the following partition(s):
DeviceName      Capacity
usba0:           128MB
usba1:           56MB
usba2:           72MB
All data on usba: will be lost, continue? [Y/N]:y
Partitioning usba:...Done.

```

file prompt

Use **file prompt** to set the operation mode for files and directories.

Use **undo file prompt** to restore the default.

Syntax

```
file prompt { alert | quiet }
```

```
undo file prompt
```

Default

The operation mode is **alert**. The system prompts for confirmation when you perform a destructive file or directory operation.

Views

System view

Predefined user roles

network-admin

Parameters

alert: Prompts for confirmation when a destructive file or directory operation is being performed.

quiet: Gives no confirmation prompt for file or directory operations except the recycle bin emptying operation.

Usage guidelines

In quiet mode, the system does not prompt for confirmation when a user performs a file or directory operation except the recycle bin emptying operation. The **alert** mode provides an opportunity to cancel a disruptive operation.

Examples

```
# Set the file and directory operation mode to alert.
<Sysname> system-view
[Sysname] file prompt alert
```

fixdisk

Use **fixdisk** to check a file system for damage and repair any damage.

Syntax

```
fixdisk filesystem
```

Views

User view

Predefined user roles

network-admin

Parameters

filesystem: Specifies the name of a file system.

Usage guidelines

Use this command to fix a file system when space in the file system cannot be used or released.

You can repair a file system only when no other users are accessing the file system.

Examples

```
# Repair file system flash:.
<Sysname> fixdisk flash:
Restoring flash: may take some time...
Restoring flash:...Done.
```

format

Use **format** to format a file system.

Syntax

```
format filesystem
```

Views

User view

Predefined user roles

network-admin

Parameters

filesystem: Specifies the name of a file system.

Usage guidelines

The device requires that the file systems on hot swappable storage media be VFAT file systems. To use a file system of a different type on the device, you must use this command to format the file system.

Formatting a file system permanently deletes all files in the file system. If a startup configuration file exists in the file system, back up the file if necessary.

You can format a file system only when no other users are accessing the file system.

A file system to be formatted cannot contain security log files. Only a user with the security-audit user role can delete security log files. For more information about the security-audit user role, see RBAC in *Fundamentals Configuration Guide*.

Examples

Format file system **flash**:

```
<Sysname> format flash:
```

```
All data on flash: will be lost, continue? [Y/N]:y
```

```
Formatting flash:... Done.
```

Format the file system on the third partition of the USB disk.

```
<Sysname> format usba2:
```

```
All data on usba2: will be lost, continue? [Y/N]:y
```

```
Formatting usba2:... Done.
```

gunzip

Use **gunzip** to decompress a file.

Syntax

```
gunzip file
```

Views

User view

Predefined user roles

network-admin

Parameters

file: Specifies the name of the file to be decompressed. This argument must use the **.gz** extension.

Usage guidelines

This command deletes the specified file after decompressing it.

Examples

Decompress file **system.bin.gz**:

1. Before decompressing the file, you can display files whose names start with the **system.** string.

```
<Sysname> dir system.*
```

```
Directory of flash:
```

```
1 -rw-          20 Jun 14 2012 10:18:53  system.bin.gz
```

1048576 KB total (472840 KB free)

2. Decompress the file `system.bin.gz`.

```
<Sysname> gunzip system.bin.gz
Decompressing file flash:/system.bin.gz..... Done.
```

3. Verify the decompress operation.

```
<Sysname> dir system.*
Directory of flash:
  1 -rw-          0 May 30 2012 11:42:25  system.bin
```

1048576 KB total (472844 KB free)

gzip

Use `gzip` to compress a file.

Syntax

```
gzip file
```

Views

User view

Predefined user roles

network-admin

Parameters

file: Specifies the name of the file to be compressed.

Usage guidelines

This command saves the compressed file to the *file.gz* file and deletes the source file.

Examples

Compress file `system.bin`:

1. Before compressing the file, you can display files whose names start with the `system.` string.

```
<Sysname> dir system.*
Directory of flash:
  1 -rw-          0 May 30 2012 11:42:24  system.bin
```

1048576 KB total (472844 KB free)

2. Compress the file `system.bin`.

```
<Sysname> gzip system.bin
Compressing file flash:/system.bin..... Done.
```

3. Verify the compress operation.

```
<Sysname> dir system.*
Directory of flash:
  1 -rw-          20 Jun 14 2012 10:18:53  system.bin.gz
```

1048576 KB total (472840 KB free)

md5sum

Use **md5sum** to use the MD5 algorithm to calculate the digest of a file.

Syntax

```
md5sum file
```

Views

User view

Predefined user roles

network-admin

network-operator

Parameters

file: Specifies the name of a file.

Usage guidelines

You can use file digests to verify file integrity.

Examples

```
# Use the MD5 algorithm to calculate the digest of file system.bin.  
<Sysname> md5sum system.bin  
MD5 digest:  
4f22b6190d151a167105df61c35f0917
```

mkdir

Use **mkdir** to create a directory.

Syntax

```
mkdir directory
```

Views

User view

Predefined user roles

network-admin

Parameters

directory: Specifies a directory.

Usage guidelines

The name of the directory to be created must be unique in the parent directory.

You can create a directory only in an existing directory. For example, to create the **flash:/test/mytest** directory, make sure the **test** directory already exists.

Examples

```
# Create the test directory in the current directory.  
<Sysname> mkdir test  
Creating directory flash:/test... Done.  
  
# Create the test/subtest directory in the current directory.  
<Sysname> mkdir test/subtest
```

Creating directory flash:/test/subtest... Done.

more

Use **more** to display the contents of a text file.

Syntax

```
more file
```

Views

User view

Predefined user roles

network-admin

Parameters

file: Specifies the name of a file.

Examples

Display the contents of the **test.txt** file.

```
<Sysname> more test.txt
```

```
Have a nice day.
```

Display the contents of the **testcfg.cfg** file.

```
<Sysname> more testcfg.cfg
```

```
#
```

```
version 7.1.070, Release 1201
```

```
#
```

```
sysname Sysname
```

```
#
```

```
vlan 2
```

```
#
```

```
return
```

```
<Sysname>
```

mount

Use **mount** to mount a file system.

Syntax

```
mount filesystem
```

Views

User view

Predefined user roles

network-admin

Parameters

filesystem: Specifies the name of a file system.

Usage guidelines

Generally, file systems on a hot-swappable storage medium are automatically mounted when the storage medium is connected to the device. If the system cannot recognize a file system, however, you must mount the file system before you can access it.

To avoid file system corruption, do not perform the following tasks while the system is mounting a file system:

- Reboot, power cycle, or power off the device.
- Install or remove storage media.
- Perform a switchover.

To remove a hot-swappable storage medium from the device, you must first unmount all file systems on the storage medium. Removing a mounted hot-swappable storage medium might damage files on the storage medium or even the storage medium.

Examples

```
# Mount a file system on the USB disk.
```

```
<Sysname> mount usba0:
```

Related commands

umount

move

Use **move** to move a file.

Syntax

```
move source-file { dest-file | dest-directory }
```

Views

User view

Predefined user roles

network-admin

Parameters

source-file: Specifies the name of the source file.

dest-file: Specifies the name of the destination file.

dest-directory: Specifies the name of the destination directory.

Usage guidelines

If you specify a destination directory, the system moves the source file to the specified directory without changing the file name.

Examples

```
# Move the flash:/test/sample.txt file to flash:/, and save it as 1.txt.
```

```
<Sysname> move test/sample.txt 1.txt
```

```
Move flash:/test/sample.txt to flash:/1.txt? [Y/N]:y
```

```
Moving file flash:/test/sample.txt to flash:/1.txt ...Done.
```

```
# Move the b.cfg file to the test2 directory.
```

```
<Sysname> move b.cfg test2
```

```
Move flash:/b.cfg to flash:/test2/b.cfg? [Y/N]:y
```

```
Moving file flash:/b.cfg to flash:/test2/b.cfg... Done.
```

pwd

Use **pwd** to display the working directory.

Syntax

```
pwd
```

Views

User view

Predefined user roles

network-admin

Examples

```
# Display the working directory.
<Sysname> pwd
flash:
```

rename

Use **rename** to rename a file or directory.

Syntax

```
rename { source-file | source-directory } { dest-file | dest-directory }
```

Views

User view

Predefined user roles

network-admin

Parameters

source-file: Specifies the name of the source file.

source-directory: Specifies the name of the source directory.

dest-file: Specifies the name of the destination file.

dest-directory: Specifies the name of the destination directory.

Usage guidelines

This command is not executed if the destination file or directory name is already used by an existing file or directory in the working directory.

Examples

```
# Rename the copy.cfg file as test.cfg.
<Sysname> rename copy.cfg test.cfg
Rename flash:/copy.cfg as flash:/test.cfg? [Y/N]:y
Renaming flash:/copy.cfg as flash:/test.cfg... Done.
```

reset recycle-bin

Use **reset recycle-bin** to delete files from the recycle bin.

Syntax

```
reset recycle-bin [ /force ]
```

Views

User view

Predefined user roles

network-admin

Parameters

/force: Deletes all files in the recycle bin without prompting for confirmation. If you do not specify this option, the command prompts you to confirm the deletion operation for each file.

Usage guidelines

The **delete file** command only moves a file to the recycle bin. To permanently delete the file, use the **reset recycle-bin** command to delete the file from the recycle bin.

Examples

Empty the recycle bin. (In this example there are two files in the recycle bin.)

```
<Sysname> reset recycle-bin
Clear flash:/a.cfg? [Y/N]:y
Clearing file flash:/a.cfg... Done.
Clear flash:/b.cfg? [Y/N]:y
Clearing file flash:/b.cfg... Done.
```

Delete the **b.cfg** file from the recycle bin. (In this example there are two files in the recycle bin.)

```
<Sysname> reset recycle-bin
Clear flash:/a.cfg? [Y/N]:n
Clear flash:/b.cfg? [Y/N]:y
Clearing file flash:/b.cfg... Done.
```

Related commands

delete

rmdir

Use **rmdir** to delete a directory.

Syntax

```
rmdir directory
```

Views

User view

Predefined user roles

network-admin

Parameters

directory: Specifies a directory.

Usage guidelines

To delete a directory, you must delete all files and subdirectories in the directory permanently or move them to the recycle bin. If you move them to the recycle bin, executing the **rmdir** command permanently deletes them.

Examples

```
# Delete the subtest directory.
<Sysname>rmdir subtest/
Remove directory flash:/test/subtest and the files in the recycle-bin under this directory
will be deleted permanently. Continue? [Y/N]:y
Removing directory flash:/test/subtest... Done.
```

sha256sum

Use **sha256sum** to use the SHA-256 algorithm to calculate the digest of a file.

Syntax

```
sha256sum file
```

Views

User view

Predefined user roles

network-admin

Parameters

file: Specifies the name of a file.

Usage guidelines

You can use file digests to verify file integrity.

Examples

```
# Use the SHA-256 algorithm to calculate the digest of file system.bin.
<Sysname> sha256sum system.bin
SHA256 digest:
0851e0139f2770e87d01ee8c2995ca9e59a8f5f4062e99af14b141b1a36ca152
```

tar create

Use **tar create** to archive files and directories.

Syntax

```
tar create [ gz ] archive-file dest-file [ verbose ] source { source-file
| source-directory }&<1-5>
```

Views

User view

Predefined user roles

network-admin

Parameters

gz: Uses gzip to compress the files and directories before archiving them. If you do not specify this keyword, the command archives the files and directories without compressing them.

archive-file *dest-file*: Specifies the archive file name. If you specified the **gz** keyword, the extension of the archive file name must be **.tar.gz**. If you did not specify the **gz** keyword, the extension of the archive file name must be **.tar**.

verbose: Displays the names of the successfully archived files and directories. If you do not specify this keyword, the command does not display the names of the successfully archived files and directories.

source { *source-file* | *source-directory* }<1-5>: Specifies the files and directories to be archived. The argument can be a space-separated list of up to five items. Each item can be a file or directory name. The specified files and directories must be in the current working directory.

Examples

Archive the **1.cfg** and **2.cfg** files and the **test** directory to **a.tar**.

```
<Sysname> tar create archive-file a.tar source 1.cfg 2.cfg test
Creating archive flash:/a.tar Done.
```

Compress and archive the **1.cfg** and **2.cfg** files and the **test** directory to **b.tar.gz**.

```
<Sysname> tar create gz archive-file b.tar.gz source 1.cfg 2.cfg test
Creating archive flash:/b.tar.gz Done.
```

Compress and archive files and directories, and display the successfully archived files and directories.

```
<Sysname> tar create gz archive-file c.tar.gz verbose source 1.cfg 2.cfg test
1.cfg
2.cfg
test/
test/a.log
test/subtest/
test/subtest/aa.log
```

Related commands

tar extract

tar list

tar extract

Use **tar extract** to extract files and directories.

Syntax

```
tar extract archive-file file [ verbose ] [ screen | to directory ]
```

Views

User view

Predefined user roles

network-admin

Parameters

archive-file *file*: Specifies the archive file name. The extension can be **.tar** or **.tar.gz**.

verbose: Displays the names of the successfully extracted files and directories.

screen: Displays the content of the extracted files and directories on the screen. The extracted files are not saved.

to directory: Saves the extracted files and directories to a different directory. The *directory* argument specifies the directory.

Usage guidelines

❗ IMPORTANT:

Before specifying the **screen** keyword for this command, use the **tar list** command to identify the types of the archived files. As a best practice, specify the keyword only if all archived files are text files. Displaying the content of an archived non-text file that contains terminal control characters might result in garbled characters and even cause the terminal unable to operate correctly. To use the terminal again, you must close the current connection and log in to the device again.

If you do not specify the **screen** keyword or the **to directory** option, the command saves the extracted files and directories to the working directory.

The command saves the extracted files and directories by using their original names. If a file or directory that has the same name as an extracted file or directory already exists in the destination directory, the file or directory is overwritten.

Examples

Extract files and directories from archive file **a.tar**.

```
<Sysname> tar extract archive-file a.tar
Extracting archive flash:/a.tar Done.
```

Extract files and directories from archive file **a.tar**, and display the names of the successfully extracted files and directories.

```
<Sysname> tar extract archive-file b.tar.gz verbose
1.cfg
2.cfg
test/
test/a.log
test/subtest/
test/subtest/aa.log
```

Extract files and directories from archive file **a.tar**, and display the content of the files on the screen.

```
<Sysname> tar extract archive-file c.tar.gz screen
#
  version 7.1.070, Release 1201
#
  sysname Sysname
#
...
```

Related commands

```
tar create
tar list
```

tar list

Use **tar list** to display the names of archived files and directories.

Syntax

```
tar list archive-file file
```

Views

User view

Predefined user roles

network-admin

Parameters

archive-file *file*: Specifies the archive file name. The extension can be **.tar** or **.tar.gz**.

Examples

```
# Display the names of archived files and directories.
<Sysname> tar list archive-file a.tar
1.cfg
2.cfg
test/
test/a.log
test/subtest/
test/subtest/aa.log
```

Related commands

tar create
tar extract

umount

Use **umount** to unmount a file system.

Syntax

```
umount filesystem
```

Views

User view

Predefined user roles

network-admin

Parameters

filesystem: Specifies the name of a file system.

Usage guidelines

File systems on a storage medium are automatically mounted when the storage medium is connected to the device. To remove a hot-swappable storage medium from the device, you must first unmount all file systems on the storage medium. Removing a mounted hot-swappable storage medium might damage files on the storage medium or even the storage medium.

You can unmount a file system only when no other users are accessing the file system.

To avoid file system corruption, do not perform the following tasks while the system is unmounting a file system:

- Reboot, power cycle, or power off the device.
- Install, remove, or access storage media.
- Perform a switchover.

Examples

```
# Unmount a file system on a USB disk.
<Sysname> umount usba0:
```

Related commands

`mount`

undelete

Use `undelete` to restore a file from the recycle bin.

Syntax

```
undelete file
```

Views

User view

Predefined user roles

network-admin

Parameters

file: Specifies the name of the file to be restored.

Usage guidelines

If a file with the same name already exists in the directory, the system prompts whether or not you want to overwrite the existing file. If you enter **Y**, the existing file is overwritten. If you enter **N**, the command is not executed.

Examples

Restore the **copy.cfg** file, which was moved from the root directory of the **flash:** file system to the recycle bin.

```
<Sysname>undelete copy.cfg
Undelete flash:/copy.cfg? [Y/N]:y
Undeleting file flash:/copy.cfg... Done.
```

Restore the **startup.cfg** file, which was moved from the **flash:/seclog** directory to the recycle bin.

- **Method 1:**

```
<Sysname>undelete seclog/startup.cfg
Undelete flash:/seclog/startup.cfg? [Y/N]:y
Undeleting file flash:/seclog/startup.cfg... Done.
<Sysname>
```
- **Method 2:**

```
<Sysname> cd seclog
<Sysname> undelete startup.cfg
Undelete flash:/seclog/startup.cfg? [Y/N]:y
Undeleting file flash:/seclog/startup.cfg... Done.
```